

DAVYDOV, P. G.

DAVYDOV, P. G. "Test of Dusters for Grain Crops," Itogi Nauchno-Issledovatel'skikh Rabot Vsesoiuznogo Instituta Zashchity Rastenii za 1935 Goda, 1936, pp. 334-336.  
423.92 L54I

SO: SJRA - SI - 90-53, 15 Dec. 1953

DAVYDOV, P. G.

DAVYDOV, P. G. "Tests of Cereal Seed Disinfection Machinery,"  
Itogi Nauchno-Issledovatel'skikh Rabot Vsesoiuznogo Instituta Zashchity Rastenii  
za 1935 Goda, 1936, pp. 325-336. 423.92 L541

SO: SIRA - SI - 90-53, 15 Dec. 1953

DAVIDOV, P. G.

AM

DAYDOZZ (P. G.). *MAKSHIN DLA PROTRASHIVANIYA SEPIA.* [Cereal seed-grain disinfecting machines.]—*Mechanization of Plant Protection, Bull. Pl. Prot. Leningr., Ser. III (Control measures and implements), 1936, 8, pp. 97-122, 6 figs., 10 graphs, 1936.*

A detailed and fully tabulated account is given of the results obtained from tests of seven cereal seed-grain disinfecting machines of Russian construction [cf. *R.A.M.*, xvi, p. 23], which showed that, after some minor structural defects have been remedied, Borghardt's combined apparatus for wet, semi-dry, and dry treatment of the seed, capable of treating up to 21 tons per 10-hour day, is the best adapted for medium and large estates. Satisfactory results were also obtained with Popoff's dusting apparatus [ibid., xiv, p. 47], capable of an output of 6 or 7 tons per hour with 9 attendants. Mention is also made of P. N. Davydoff's apparatus for treating the seed with formaldehyde vapours, which does not affect injuriously the germinability of the seed; the apparatus in its present form presents, however, some defects, such as not being gas-tight, and inadequacy of the formalin solution heating contrivance, but could be usefully employed if these were remedied. None of the other machines tested was satisfactory.

ASR-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

1936 12 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

DAVYDOV, P. G.

DAVYDOV, P. G. "The Machine D-1 for Disinfection of Grain Seed Against Smut,"  
Itogi Nauchno-Issledovatel'skikh Rabot Vsesoiuznogo Instituta Zashchity Rastenii  
za 1936 Goda, 1937, pp. 100-104. 423.92 L54I

SO: SIRA - SI - 90-53, 15 Dec. 1953

DAVIDOV, P. G.

DAVIDOV, P. G. "Choice of the Best Type of Screw for Use in the Machine AB-2 for Disinfecting Flax Seeds," Itogi Nauchno-Issledovatel'skikh Rabot Vsesoiuznogo Instituta Zashchity Rastenii za 1936 Goda, 1937, pp. 355-358. 423.92 L54I

SO: SIRA - SI - 90-53, 15 Dec. 1953

DAYIDOV, P.G.

DAVIDOV, P.G., kandidat sel'skokhozyaystvennykh nauk; KVARATSKHELIYA, M.T.,  
kandidat sel'skokhozyaystvennykh nauk.

Using the Davydov universal seed disinfectant (PU-1) for coating  
seeds with phosphobacterin. Dokl. Akad. sel'khoz. 22 no. 5: 44-48 '57.

(MLRA 10:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystvennoy  
mikrobiologii. Predstavleno akademikom I.I. Samoylovym.

(Seeds) (Bacteria, Phosphorus)

DAVIDOV, P.G., kand. sel'skokhozyaystvennykh nauk

Testing the SOP-43 hotbed seeder. Trakt. i sel'khoz mash.  
no.1:20-22 Ja '59. (MIRA 12:1)  
(Planters (Agricultural machinery)--Testing)

DAVIDOV, P.G., kand.sel'skokhoz.nauk

How to use the PU-1 machine. Zashch.rast.ot vred.i bol 5  
no.3:31-32 Mr '60. (MIRA 16:1)

(Seeds--Disinfection)



DAVYDOV, P.G., kand.sel'skokhoz.nauk

Proportioner and feeder of dry poisonous chemicals. Zashch. rast.  
ot vred. i bol. 6 no.12:13 D '61. (MIRA 16:5)

DAVYDOV, P. I.

DAVYDOV, P. I.: "The effect of the depth of ground water on the growth of pine and spruce plantations." Fin Higher Education USSR. Leningrad Order of Lenin Forestry Engineering Academy imeni S. M. Dirov. Leningrad, 1956.  
(Dissertation for the Degree of Candidate in Agricultural Sciences).

SO: Knizhnaya letopis', No 23, 1956

*Davydov, P.I.*

USSR/Forestry - Tree Biology and Typology.

K.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 95816

Author : Piskunov, Kh.A., Davydov, P.I.

Inst : Leningrad Forestry Academy.

Title : Influence of Depth of Ground Waters on Productivity of Forest Land.

Orig Pub : Tr. Leningr. lesotekhn. akad., 1956, vyp. 73, 29-47.

Abstract : In 1949, observations were conducted at the Lisinskiy Training-Experimental Leskhoz on the dynamics of ground waters which influence moisture conditions on cutovers and the course of growth of pine-spruce plantations. It is stated that the degree of moisture on the cutovers fluctuates, depending on the age of the plantations. The dynamics of snow accumulation are characterized, depending on the age of the pine and spruce plantations, and

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Abs Jour : Ref Zhur - Biol., No 21, 1958, 95816

the influence of precipitation is shown on the moisture cycle of the soil in plantations of different quality and in cutovers. With a decrease in the level of ground waters to determined limits, the growth of plantations is improved, by means of which, with an increase in quality, the level of the ground waters is decreased and vice versa. In pine plantations of I and II quality, ground waters in May deposit 15-20 cm from the soil surface, and in plantations of III-IV quality - 8-10 cm. It is shown that forest requirements for ground water level changes not only with the composition of species but also with the age of the plantations. At the end of May, in plantations of I and II quality, a marked improvement in height growth of pine was noted with the decrease in the ground water level up to 20 cm. Intensive pine growth was observed in the middle of June when the depth of the deposit in these plantations comprised less than 35-50 cm;

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Card 3/3

BRUSYANTSEV, Nikolay Vasil'yevich, CHERNOZHUKOV, N.I., doktor tekhn.nauk, retsenzent, DAVYDOV, P.I., kand.tekhn.nauk, retsenzent, GULIN, Ye.I. kand.tekhn.nauk, retsenzent, DEMCHENKO, V.S., kand.tekhn.nauk, retsenzent, SHTEPAN, M.G., kand.tekhn.nauk, retsenzent, PAPOK, K.K. doktor tekhn. nauk, red.; NAKHIMSON, V.A., red.izd-va., UVAROVA, A.F., tekhn.red.

[Motor vehicle and tractor fuels and lubricants]. Avtotraktornye topliva i smazochnye materialy. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958 . 340 p. (MIRA 11:9)

(Motor fuels)

(Lubrication and lubricants)

29239

Z/011/61/018/010/007/011  
E030/E312

11-0132

AUTHORS: Davydov, P.I. and Bol'shakov, G.F.

TITLE: Influence of natural resinous substances on the thermal stability of jet fuels

PERIODICAL: Chemie a chemická technologie; Přehled technické a hospodářské literatury, v. 18, no. 10, 1961, 468, abstract Ch61-6470 (Khimiya i tekhnologiya topliv i masel, no. 10, 1960, 35 - 38)

TEXT: The thermal stability of jet fuel, type TC -1 (TS-1) (boiling range 138 to 230 °C) produced at the Mukhanovskiy refinery from Devonian crude was tested by keeping it at 150 °C for six hours in an air thermostat bath. Four indices of stability were employed: corrosion of a plate of bronze, type BE-24 (VB-24), in g/m<sup>2</sup>; deposit on the plate, in g/m<sup>2</sup>; quantity of sediment in the fuel, in mg/100 ml., and the acid value of the fuel. The fuels contained naturally 0.03 to 0.20% wt. of resin, of average molecular weight 185.4, with 7.5 wt.% of total sulphur and 0.35 wt.% of total nitrogen. Before a stability run, the resins in the fuels were removed over silica gel, in a solution of  
Card 1/2

29239

Z/011/61/018/010/007/011  
E030/E312

Influence of ....

1:1:1 volume mixture of acetone, ethyl alcohol and benzene. Known amounts of resin, from 0.01 - 0.19 wt.%, were then reintroduced. It was found that there was an optimum resin concentration, around 0.07 wt.%, and at higher or lower concentrations than this the thermal stability became worse. The thermal stability could be considerably improved by addition of 0.05 wt.% of a sulphur compound (2-phenyl-2-mercaptobutylamine) or of a nitrogen compound (1, 2, 3, 4-tetrahydroquinoline). 5 figures, 5 tables.

[Abstracter's note: the brief Czech abstract has been substituted by an abstract of the original article.]

Card 2/2

DAVIDOV, P.I.; BOL'SHAKOV, G.F.; GLEBOVSKAYA, Ye.A.

Investigating the effect of nitrogen bases on the stability  
of fuels at increased temperatures. Khim. i tekhn. topl. i  
masel 7 no.10:20-26 0'62 (MIRA 17:7)

L 10117-63

EPF(c)/ENT(m)/BDS--APFTC/APGC--Fr--~~EN~~/WW/EN/MN/MAY

ACCESSION NR: AP3001314

S/C933/63/005/000/0160/0176

AUTHOR: Bol'shakov, G. F.; Davydov, P. I.; Potapenko, T. G.; Rachinskiy, F. Yu.; Slavachevskaya, N. M.

TITLE: Effect of natural and synthetic sulfur- and nitrogen-containing compounds on the thermal oxidative stability of straight-run fuels [Report presented at the Sixth Scientific Session on the Chemistry of Organosulfur Compounds of Crude Oil and Petroleum Products held at Ufa, 27 June - 1 July 1961]

SOURCE: AN SSSR. Bashkirskiy filial. Khimiya sereorganicheskikh soyedineniy, sodержashchikh v neftyah i nefteproduktakh, v. 5, 1963, 160-176

TOPIC TAGS: TS-1, T-1, DA, thermal oxidative stability, S and N compounds, resin, Getseu corrosion, sediment, amino sulfides, amino disulfides, amino thiols, amino nitriles, thiazolidines, thiazolines, azomethines, ionol, tetrahydroxy-quinoline, 2-phenyl-2-mercaptobutylamine

ABSTRACT: Mixtures of natural S- and N-containing compounds of a "basic" character, i.e., extractable with 25% H sub 2 SO sub 4, were separated from the

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L 10117-63

ACCESSION NR: AP3001314

resinous portions of TS-1, T-1, and DA fuels by a method described by V. V. Getseu (Neftyanoye khozyaystvo, no. 11, 68, 1954). The effect of various amounts of these compounds on the thermal-oxidative stability (TOS) of resin-free fuels at 150C was studied by means of a device designed by the authors. The TOS was evaluated from the corrosion of and amount of sediment on a bronze strip and from the amount of fuel-insoluble sediment. It was shown that mixtures of S- and N-containing compounds improve the TOS of the fuels when used in certain optimum amounts (0.03-0.05% for TS-1, 0.05-0.99% for DA, and 0.02-0.06% for T-1). This improvement was attributed to the ability of certain of these components to inhibit fuel oxidation and to form films on bronze which "protect" the fuel from the catalytic effect of the metal. The effect of individual S- and N-containing compounds on the TOS of fuels was studied by adding to TS-1 fuel 0.05% of one of the synthetic compounds (such as amino sulfides, amino disulfides, amino thiols, amino nitriles, thiazolidines, thiazolines, azomethines, ionol and its derivatives, and tetrahydroxyquinoline and its derivatives). It was shown that most of these compounds lower the TOS of straight-run fuels (with the exception of 2-phenyl-2-mercaptobutylamine, 1,2,3,4-tetrahydroquinoline, certain ionol derivatives, and a reaction product of phenol and styrene). The results of the study indicate that resins of TS-1, T-1, and DA fuels contain compounds (mainly heterocyclic with thiol, amino,

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L 10117-63

ACCESSION NR: AP3001314

and phenyl groups) which, in small amounts, can improve the TOS of fuels. Orig.  
art. has: 3 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 28May63

ENCL: 00

SUB CODE: 00

NO REF SOV: 004

OTHER: 002

OKH/1/16  
Card 3/3

20055

S/065/61/000/005/001/002  
E030/E435

11.1210

AUTHORS: Davydov, P.I. and Bol'shakov, G.F.

TITLE: Influence of Mercaptans on the Formation of Insoluble  
Deposits in Fuels at High Temperatures

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1961, No.5,  
pp.48-53

TEXT: An experimental study has been made of the influence of mercaptans on the formation of insoluble deposits in aviation fuel TC-1 (TS-1), which may contain up to 0.01% mercaptans, according to the sulphur specification in ГОСТ 7149-54 (GOST 7149-54). The influence of bronze and brass on catalysing the deposition has also been studied. By using different crudes, fuel sulphur contents between 0.14 and 0.18% were obtained with corresponding mercaptan contents between 0.005% and 0.211%; a hydrofined Tuymazy kerosene was also studied, with 0.011% sulphur and no measurable mercaptan content. To the latter were then added synthetic octylmercaptans and thiophenols. The fuels were maintained in glass vessels for periods of six hours for temperatures from 100 to 350°C and strips of bronze 85-24 (VB-24)  
Card 1/3

20055

S/065/61/000/005/001/002

E030/E435

Influence of Mercaptans ...

of area 20 cm<sup>2</sup>/100 ml fuel, and/or of brass of area 113 cm<sup>2</sup>/100 ml fuel, could also be immersed in the fuel to see the effect of the metals. At all temperatures the amount of deposit increased with increasing sulphur content and hydrofined fuel was thermally stable, giving a maximum deposition of only 2 mg/100 ml fuel at 150°C. All fuel deposits showed a maximum around 150°C. When either brass or bronze, or both, were added the deposition in the fuel increased about ten times as strongly, but with thiophenols oxidation decreased; this was associated with a complete removal of thiophenol from the fuel, presumably having formed a protective layer on the metals. A study was also made of the particle size distribution of the sediment by passing the fuel through a cassette, containing a series of filters of pore size decreasing from 125 micron to 5-7 micron, followed by a No.4 sinter. Results are shown in Fig.4: influence of mercaptans on the size distribution of insoluble fuel sediments.

1. Hydrogenated fuel TS-1.
2. TS-1 with 0.0105% mercaptans.
3. Hydrogenated TS-1 + 0.01% secondary octylmercaptan.
4. Hydrogenated TS-1 + 0.01% thiophenol. Deposit on filter in

Card 2/3

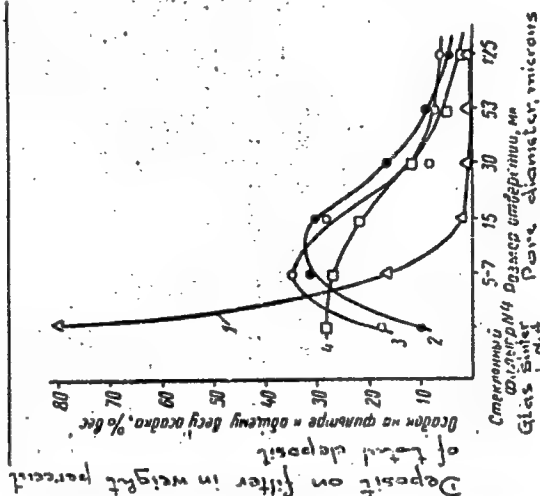
20055

S/065/61/000/005/001/002  
E030/E435

# Influence of Mercaptans ...

weight percent of total deposit vs pore diameter in microns  
(glass sinter No.4). There are 4 figures, 5 tables and  
5 references: 4 Soviet and 1 non-Soviet.

Fig. 4



Card 3/3



Effect of sulfurous compounds on the thermal stability...S/750/62/000-000/000...

properties and the thermal stability of water-purified TS-1 fuel are...  
2-phenyl-2-mercaptobutylamine. Corrosion and oxidation-condensation processes are...  
mercaptane content. An increase in mercaptane content...  
0.01% (in weight of the % of S referred to the fuel) increases corrosion...  
precipitation by more than 3 times. Photographs of corroded bronze...  
are shown. 0.000% of 2-phenyl-2-mercaptobutylamine has an opposite...  
inhibiting effect. The aliphatic-mercaptane content in real fuels...  
There are 3 figures and 2 tables; no references.

ASSOCIATION: None given.

Card 3/1

DAVIDOV, P.I.

Motor, jet, and rocket fuels: Khim. i tekhn. topl. i masel 8  
no.6:71-p. 2 of cover Je '63. (MIRA 16:6)

(Motor fuels)  
(Rockets(Aeronautics)—Fuel)  
(Jet planes—Fuel)



CHERTKOV, Yakov Borisovich; BOL'SHAKOV, Gennadiy Fedorovich;  
GULIN, Yevgeniy Il'ich; DAVYDOV, P.I., nauchn. red.;  
SHEVTSOVA, E.M., ved. red.; YASHCHURZHINSKAYA, A.B.,  
tekhn. red.

[Jet fuels] Topliva dlia reaktivnykh dvigatelei. Le-  
ningrad, Izd-vo "Nedra," 1964. 225 p. (MIRA 17:3)

DAVIDOV, P.I.; SOMOV, V.A.

Useful book. Khim. i tekh. topl. i masel 9 no.9:71-72 S '64.  
(MIRA 17:10)

1. DAVYDOV, P.K.
2. USSR (600)
4. Technology
7. Mass production construction of homes for miners. Moskva, Ugletekhizdat. 1951?

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Uncl.

DAVYDOV, P.M.

Competition continues. Neftianik 6 no.5:4-5 My '61. (MIRA 14:5)  
(Azerbaijan—Petroleum industry)  
(Bashkiria—Petroleum industry)

DAVYDOV, PAVEL NIKOLAYEVICH

DECEASED

1890-1958

1964

*Plant Diseases*

ACC NR: AT6037048

SOURCE CODE: UR/0000/66/000/000/0110/0121

AUTHOR: Davydov, P. S. (Engineer); Utkina, G. A. (Engineer)

ORG: none

TITLE: The effectiveness of using comb-type filters to store quasicohherent trains of radio pulses

SOURCE: Moscow. Aviatsionnyy institut. Teoriya i tekhnika radiolokatsii (Radar theory and techniques); sbornik statey, no. 1. Moscow, Izd-vo Mashinostroyeniye, 1966, 110-121

TOPIC TAGS: radar signal processing, filter, coherent radar

ABSTRACT: The processing of quasicohherent trains of radio pulses by means of a comb-type filter, matched to an ideally coherent signal, is considered theoretically. It is shown that the disruption of coherence within the train of pulses leads to a redistribution of energy in the signal frequency band between the continuous and discrete parts of the energy spectrum. The equations which are derived make it possible to evaluate approximately the efficiency of processing quasicohherent trains of radio pulses by means of comb-type filters as a function of the degree of signal coherence and of the number of pulses in a train. The disruption of signal coherence within a train where the root-mean-square deviation is up to 0.5 rad produces practically no decrease

UDC: 621.396.96.001(04)

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ACC NR: AT6037048

in the efficiency of coherent processing. When the signal coherence is disrupted with root-mean-square deviations up to 1.0 rad, coherent processing remains as effective as incoherent processing from the energy point of view. The maximum losses resulting from the disruption of coherence take place when an incoherent train is processed with a comb-type filter. In this case the storage effect is totally absent and the only optimum method of processing such trains is post-detection storage. Orig. art. has: 3 figures, 37 formulas.

SUB CODE: 17,09/

SUBM DATE: 15Jul66/

ORIG REF: 005

Card 2/2

IVANOV, Viktor Gavrilovich, inzh.; DAVIDOV, Pavel Semenovich, inzh.; BLAY-  
VAS, Leonid Abramovich, inzh.; LOSS', Pavel Moiseyevich, inzh.; KHA-  
CHATUROV, V.V., red.; LAVRENOVA, N.B., tekhn. red.

["Donets" marine radar station] Sudovaia radiolokatsionnaia stantsia  
"Donets." By V.G.Ivanov i dr. Moskva, Izd-vo "Morskoi transport,"  
1961. 130 p. (MIRA 14:10)

(Radar in navigation)



DAVYDOV, P. V.

B. A. Kiselev, Z. A. Zinov'yeva, Ya. D. Avrasin and P. V. Davydov, "Obtaining a Hydrophobic Glass-textolite Based on Polyester Binders."

Report presented at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1958.

Zhurnal prikladnoy khimii, 1959, Nr 1, pp 238-240 (USSR)

S/661/61/000/006/070/081  
D247/D302

AUTHORS: Kiselev, B. A., Zinov'yeva, Z. A., Avrasin, Ya. D. and  
Davydov, P. V.

TITLE: Applying silicoorganic compounds to production of constructional glass textolite

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh soyedineniy; trudy konferentsii, no. 6: Doklady, diskussii, resheniye. II Vses. konfer. po khimii i prakt. prim. kremneorg. soyed., Len. 1958. Leningrad, Izd-vo AN SSSR, 1961, 300-304

TEXT: Constructional purposes require high durability of the compounds under static bending and the dependence of this property on temperature was studied for various silico-organic compounds. Modifications of the silicones with organic resins were investigated. During the discussion in which A. Ya. Korolev (Moscow) took part, the possibilities of water repellence were mentioned. Methacryloxy- ✓

Card 1/2

Applying silicoorganic compounds ...

S/661/61/000/006/070/081  
D247/D302

methyl triethoxysilane was recommended for its water repellent properties and also for improving mechanical and dielectric properties. The problem of combining water repellence, with a high angle of contact between water and the material, with good adhesive properties, was discussed. The effect of the lubricants found on industrial glass fibers was also mentioned.

Card 2/2

ACCESSION NR: AP4045018

S/0191/64/000/009/0018/0020

AUTHOR: Vinogradova, L. M., Korolev, A. Ya., Davy\*dov, P. V., Kuchenkova, R. V.

TITLE: Selection and application of organosilicon liquids for decreasing the adhesion of plastics to solid surfaces

SOURCE: Plasticheskiye massy\*, no. 9, 1964, 18-20

TOPIC TAGS: organosilicon, molding, antiadhesion film, polyethylhydrosiloxane, polymethylhydrosiloxane, plastic adhesion, polydimethylsiloxane

ABSTRACT: The effect of the nature and composition of organosilicon solutions and of the molding conditions of thin films on their effectiveness in decreasing adhesion of polymers to hard surfaces was studied. Liquid polymethyl- and polyethyl-hydrosiloxane and polydimethylsiloxane with a varying content of hydroxyl groups were investigated. The effect on the adhesive properties of treatment of a silicate glass surface with polymethylhydrosiloxane solutions and the effect of the treatment of a steel surface with a 5% polymethylhydrosiloxane solution in benzene were investigated and discussed on the basis of tabulated data. The experimental data for both tests agreed substantially. It was found that adhesion to polar compounds can be completely eliminated by surface treatment with polyethylhydrosiloxane solutions in benzene or with aqueous emulsions of this liquid.

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ACCESSION NR: AP 4045018

During hardening of films from polydimethylsiloxane solutions, which contain 2.7% hydroxyl groups in the macromolecule, on the surface of steel, either at 200C for two hours or even in the presence of a catalyst (tin diethyldicaprylate) at room temperature for 48 hours, the resistance to peeling decreased from 412 kgs/cm<sup>2</sup> (control sample) to 16-20 kgs/cm<sup>2</sup> (modified sample). Polydimethylsiloxane without hydroxyl groups affects adhesion to the steel only slightly, even at a hardening temperature of 200C. Thin layers of the investigated organosilicon solutions with active functional groups are retained strongly on steel or glass surfaces. They are not removed even by prolonged extraction of the sample with boiling (80C) benzine, and retain their anti-adhesion properties at the level found before extraction. These anti-adhesive agents increase the molding performance and can also be used advantageously for molding heat-stable rubbers. The organosilicon compounds, by forming very thin films on the walls of the molds, facilitate the removal of the plastic moldings from the mold, ensure a smooth surface and protect the metal molds against corrosion. In addition to thermal stability, their chemical inertness toward the material of the molds is another advantage. "The tests on PMS-31 (polymethylhydrosiloxane) were carried out with the cooperation of A. A. Moiseyev, V. V. Pavlov, V. P., Terebenin and V. P. Frolov". Orig. art. has: 3 tables.

ASSOCIATION: None

Card

2/3

ACCESSION NR: AP4045018

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 009

OTHER: 000

3/3

Card

DAVIDOV, R.Z.MEDVEDEVA, T.S., red.; AGZAMOV, K., tekhn. red.

[Rectal fistulas] Rektal'nye svishchi. Tashkent, Gos. med. izd-  
vo M-va zdravookhraneniia UzSSR, 1961. 55 p. (MIRA 15:1)  
(FISTULA, ANAL)

DAVYDOV, R. Z.: Master Med Sci (diss) -- "The clinical aspects, treatment,  
and pathohistology of pararectal fistulas". Frunze, 1958. 15 pp (Kirgiz State  
Med Inst), 210 copies (KL, No 6, 1959, 143)



1. MIKSHA, S. ; DAVYDOV, S.
2. USSR (600)
4. Telegraph
7. Insistently introduce progressive labor practices, Sov. sviaz., 3,  
No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

AUTHOR: Davydov, S., Engineer.

66-1-17/26

TITLE: Improvement in the operation of a remote level indicator.  
(Uluchsheniye raboty dstantsionnogo ukazatelya urovnya).

PERIODICAL: "Kholodil'naya Tekhnika" (Refrigeration Engineering),  
1957, No.1, pp.56-57 (U.S.S.R.)

ABSTRACT: The improvement consists of providing a heater for  
preventing freezing and corrosion of certain components in  
AY-2 and AY-3 type remote control level indicators which  
are widely used in the Soviet refrigeration industry so as  
to eliminate measuring inaccuracies.  
There are two figures.

AVAILABLE:

Card 1/1

DAVYDOV, S., inzh.

Modifying system for the removal of liquid ammonia protective  
receivers. Khol.tekh. 35 no.5:56 S-0 '58. (MIRA 11:11)  
(Leningrad--Refrigeration and refrigerating machinery)  
(Ammonia)

DAVIDOV, S., inzh.

Oil feed unit for vertical compressors. Khol.tekh. 35 no.6:64-  
66 N-D '58. (MIRA 12:1)

(Compressors)

DAVIDOV, S.

Eliminating floating ice on rivers. Avr. dor. 22 no.10:32  
Avt. dor. 22 no.10:32 0 '59. (MIRA 13:2)  
(Ice on rivers, lakes, etc.)

DAVYDOV, S.

Plastic concrete and mesh-reinforced plastic concrete are new building materials. Na stroi.Ros. no.4:20-23 Ap '61. (MIRA 14:6)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR.  
(Concrete)

S/081/62/000/003/058/090  
B149/B102

AUTHOR: Davydov, S.

TITLE: Plastic concrete and reinforced plastic concrete - new  
construction materials

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 3, 1962, 393, abstract  
3K369 (Na stroykakh Rossii, no. 4, 1961, 20-25)

TEXT: Properties and various examples of the use of plastic concrete are  
described: in hydraulic engineering and housing and in strengthening of  
suboils, as wear-resistant, anti-corrosive material, and as floor-  
covering with low specific heat. [Abstracter's note: Complete  
translation.] ✓

Card 1/1

DAVYDOV, S.

For an intergrated production line in all enterprises. Mias. ind. SSR 23, No 3,  
1952.



DAVYDOV, S.

Unused potentialities of the industry should be utilized on a wide scale. Mas. ind. SSSR 24 no.5:9-13 '53. (MLRA 6:12)

1. Glavnyaso.

(Meat industry)

DAVYDOV, S.; SHIPOV, V.

Utilise all resources for greater labor productivity. Mias.ind.  
SSSR 25 no.4:12-15 '54. (MLRA 7:8)

1. Glavnyaso (for Davydov); 2. Vsesoyuznyy nauchno-issledovatel'skiy  
institut myasnoy promyshlennosti (for Shipov)  
(Meat industry)

DAVIDOV, S.

Awaiting the 20th Party Congress. Mias.ind.SSSR 26 no.6:25-29 '55.  
(Meat industry) (MLRA 9:2)

DAVIDOV, S., inzh.

Make maximum use of river transportation in the shipping of chemical cargoes. Rech. transp. 23 no.12;4-5 D '64.

(MIRA 18:6)

1. Instruktor Kuybyshevskogo oblastnogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza.

DAVYDOV, S. A.

USSR/Medicine - Hygiene and Sanitation May 50  
Air, Impurities

"Contamination of the Atmosphere by Sulfur  
Dioxide From Mine Rock Dumps," D. M. Kaly-  
uzhnyy, S. A. Davydov, L. G. Dukarskaya, M. B.  
Aksel'rod, Ukrainian Inst of Communal Hygiene

"Gig 1 San" No 5, pp 19-24

Studies amount of contamination caused by  
oxidation of sulfur compounds in waste rock  
and coal of the dump at three mines of Stalinsk  
Oblast in 1948. Degree of sulfur dioxide for-  
mation depends on chemical composition of rock  
and coal, height of pile, period of time pile  
170163

USSR/Medicine - Hygiene and Sanitation May 50  
(Contd)

has existed, meteorological conditions, and  
other factors. Under most favorable factors  
for oxidation increased concentrations of sul-  
fur dioxide in the air were found up to radius  
of 1,500 meters. Under less favorable condi-  
tions, limit was radius of 750 meters. Pro-  
tective zone required between dump and living  
quarters should be 500-1,500 meters, depend-  
ing on intensity of oxidation, direction of  
prevailing winds, and chemical composition of  
pile. Includes table and 3 figures.

170163

DAVYDOV, S.A.

KALIUZHNYY, D. N., KOSTOETSIIY, YA. I.  
DAVYDOV, S. A., AKSEL'ROD, M.B.

City Planning - Zone System

Hygienic efficacy of protective zones  
between industrial plants and living  
quarters. Gig. i san No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 195<sup>2</sup><sub>5</sub>, Uncl.

RUCHKIN, Vladimir Matveyevich; DAVYDOV, Stepan Aleksandrovich; PRUDNIKOVA,  
M.N., redaktor; LYUDKOVSKAYA, N.I., tekhnicheskii redaktor

[Briefly retarded explosions in open pit mines] Korotkozamedlennoe  
veryvanie na kar'erakh. Moskva, Gos. izd-vo lit-ry po stroit.  
materialam, 1956. 51 p. (MLRA 10:1)  
(Blasting)

15-57-8-11757  
Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 8,  
p 255 (USSR)

AUTHOR: Davydov, S. A.

TITLE: Use of Short-Time Delayed Action Blasting in Open Pit  
Mines (Opyt primeneniya korotkozamedlennogo vzryvaniya  
na kar'yerakh)

PERIODICAL: V sb: Korotkozamedl. vzryvaniye v gorn. dele. Moscow,  
Ugletekhizdat, 1956, pp 76-79

ABSTRACT: Investigations of short-time delayed action blasting  
have established the following advantages of this  
process: 1) reduction in seismic effects caused by  
explosions by an average of 1.5 times when blasting  
with one delay and by 3 to 3.5 times in consecutive  
blastings; 2) an increase in yield of 30 percent of  
material from 1 m depth of the blasting hole in  
comparison with instantaneous detonation (with the

Card 1/2



15-57-8-11757

Use of Short-Time Delayed Action Blasting (Cont.)

maximum possible spacing of blasting holes) or by 2.5 to 3 times (with the standard spacing); 3) a decrease of 20 to 40 percent in the width of the demolition area, while in consecutive blasting with a delay of 60 to 80 milliseconds a controlled unilateral demolition area is obtained; and 4) a tendency toward reduction of the amount of unbroken material with optimum delays. The author gives data on the increase in efficiency of blasting operations when using short-time delayed action blasting. Extensive use of this type of blasting is impeded by the lack of electric detonators with millisecond delays and of primachord detonational relays. The author emphasizes the necessity for investigation of the physics involved in the phenomena occurring in mountain ranges when short-time delayed action blasting is used. A table is included.

B. E. Fridman

Card 2/2

ZLOTNIK, A.M.; DAVYDOV, S.A.

Optimum parameters of blasting operations using the method of  
holes. Vzyv.rab. no.3:108-116 '56. (MIRA 16:2)  
(Blasting)

DAVYDOV, S.A.

SUBJECT: USSR/Mining

127-10-23/24

AUTHORS: Leontovich, L.V. and Davydov, S.A., Engineers.

TITLE: On Pyroxylin Application in Open Mines (O primeneni piroksilinykh porokhov na otkrytykh rabotakh)

PERIODICAL: Gornyy Zhurnal, 1957, #10, p 78 (USSR)

ABSTRACT: The authors dispute the conclusions drawn by Starikov, N.A. et al. in the paper published in the "Gornyy Zhurnal", 1956, # 12, pp 21-23, about the better results obtained with pyroxylin as compared to ammonite #6.

These conclusions are considered to be not founded well enough because the data pertaining to both kinds of explosives were not obtained under identical conditions.

One Slavic reference is cited.

ASSOCIATION: Industrial-Experimental Department of the "Soyuzvzryvprom" Trust (Proizvodstvenno-eksperimental'noye upravleniye tresta "Soyuzvzryvprom")

PRESENTED BY: No date indicated.

SUBMITTED: At the Library of Congress

Card 1/1

14(5)

SOV/127-59-3-20/22

AUTHOR: Davydov, S.A.

TITLE: On Rocks to be Blasted, (O vzryvayemykh sredakh.)

PERIODICAL: Gornyy zhurnal, 1959, Nr 3, pp 73-78 (USSR)

ABSTRACT: The author proposes the classification of rocks from the point of view of their resistance to blasting. A preliminary classification was made as a result of extensive tests made by the Industrial Experimental Management (PEU) of the Soyuzvzryvprom Trust to determine the blast penetrability of different rocks. Preliminary classification was based on the so-called indicator of blast penetrability.  $P_{pr}$  (pokazatel' prostrelivayemosti porod) which is the ratio of the volume of the hole ( $V_k$ ) formed by blasting to the weight of the blasting charge ( $Q_p$ ).

Card 1/3

$$P_{pr} = \frac{V_k}{Q_p}$$

SOV/127-59-3-20/22

On Rocks to be Blasted.

The first so-formed scale (table 1) comprised 14 different rocks. According to the value of  $P_{pr}$ , these rocks were divided into three groups: soft rock, semi-hard rocks, and hard rocks (table 2). A further, more - detailed classification must be made for each separate group, the factors governing the blasting conditions being absolutely different for each group. To the first group belong soft rocks formed from different combinations of kaolin and sand. The classification here is made according to the predominance of one or another component, and the degree of humidity, the last being a most important factor (table 3). Hard rocks belonging to the third group do not form a solid mass. They usually are more or less deeply fissured and cemented together by crystals of secondary minerals that fill the fissures. The blasting action has to overcome only the resistance of these cementing minerals. As a result

Card 2/3

SOV/127-59-3-20/22

On Rocks to be Blasted.

of numerous experiments, the author found that the amount of blasting charge is directly proportional to the volumetric weight of rocks. They should be classified rather according to the degree of their disintegration, which characterizes the possibility of regulating their break-up. Semi-hard rocks from the second group have some of features of first, as well as of the third group. As these rocks are usually blasted to loosen them, they should be classified according to the degree of adhesion, on which their break-up depends. There are 4 tables and 6 soviet references.

ASSOCIATION: Proizvodstvenno-eksperimental'noye upravleniye tresta Soyuzvzryvprom, Moskva (The Industrial Experimental Management of the Soyuzvzryvprom Trust, Moscow.)

Card 3/3

TSIYER, M.M., inzh. ~~DAVIDOV~~, S.A., inzh.

Method for calculating the blasting in excavating broad-profile  
cuts. Transp. stroi. 10 no.9:48-50 S '60. (MIRA 13:9)  
(Blasting) (Railroads--Earthwork)

DAVIDOV, S.A.

Prospects for the use of short-delay blasting in Dzhezkazgan  
underground and open-pit mines. Vzryv.delo no.44/1:178-183 '60.  
(Dzhezkazgan--Mining engineering) (MIRA 13:7)



S/127/60/000/002/003/004  
B012/B058

AUTHORS: Roytman, R. N., and Davydov, S. A.

TITLE: Pyrotechnic relay KЗДШ-58 (KZDSh-58)

PERIODICAL: Gornyy zhurnal, no. 2, 1960, 49-50

TEXT: A new means for short-delay blasting, the pyrotechnic relay KЗДШ-58 (KZDSh-58) was developed by the Proizvodstvenno-eksperimental'noye upravleniye (PEU) Soyuzvzryvproma (Production and Experimental Administration of Soyuzvzryvprom). An illustration of the relay is attached. Its advantages are the four delay stages of  $10 \pm 3$ ,  $20 \pm 5$ ,  $35 \pm 7$ , and  $50 \pm 7$  m sec (in contrast to the well-known Belgian relay which has one stage of 17 m sec). The relay was successfully tested in 1959 in the Levikha mine, for ditching at Nadvoitsy (blasting of boreholes 106 mm diameter), at the Matkosel'kya marble-quarry (Karel'skiy Isthmus), in opencast mining of the Vishnevogorskoye rudoupravleniye (Vishnevogorsk Mine Administration), at the Shartash granite-quarry, at the Degtyarka copper mine, in opencast mining at the YuGOK and others. It permits practically any delay combina-

Card 1/3

PAPOROTSKIY, L.A.; DAVYDOV, S.A.; LISITSYN, G.T.; URUMOV, T.M.; SAPARGALIYEV, M.S.; SULEYMANOV, M.S.; AN, M.Ch.

Comment on the article by O.A. Baikomurov and A.F. Kovrigo on "Ways of reducing labor consuming tasks in stopping at the Dzhezkazan Mine." Gor.zhur. no.3:77 Mr '60. MIRA 14:5)

1. Proizvodstvenno-eksperimental'noye upravleniye Soyuzvzryvproma, Moskva (for Paportotskiy, Davydov). 2. Nachal'nik buro-vzryvnykh rabot Dzhezkazganskogo rudoupravleniya (for Lisitsyn). 3. Nachal'nik shakhty no.51 Dzhezkazganskogo rudnika (for Urumov). 4. Nachal'nik burovzyvnykh rabot shakhty no.51 Dzhezkazganskogo rudnika (for Sapargaliyev). 5. Zamestitel' glav.inzh. shakhty no.51 Dzhezkazganskogo rudnika (for Suleymanov). 6. Starshiy inzh. Instituta gornogo dela AN KazSSR (for An).

(Dzhezkazgan—Stopping (Mining)  
(Baikomurov, O.A.) (Kovrigo, A.F.)

DAVIDOV, S.A.

Fracturing of rocks and the effect of blasting. Vzryv. delo  
no.53/10:28-31 '63. (MIRA 16:8)

1. Proizvodstvenno-eksperimental'noye upravleniye Soyuzvzryvproma.  
(Joints (Geology)) (Blasting)

BOGUN, Georgiy Sergeyevich; NIKIFOROV, Nikolay Nikolayevich;  
DAVYDOV, S.A., red.

[Labor safety and the conducting of blasting operations  
in ferrous metallurgy plants] Okhrana truda i proizvod-  
stvo vzryvnykh rabot na zavodakh chernoi metallurgii.  
Moskva, Metallurgiya, 1964. 109 p. (MIRA 17:12)

PETROV, Nikolay Grigor'yevich; ZUBKOV, P.N., retsenzent; OSIFOV,  
M.T., retsenzent; DOKUCHAYEV, M.M., retsenzent;  
DAVYDOV, S.A., otv. red.

[Short-delay blasting in mines] Korotkozamedlennoe vzry-  
vanie v shakhtakh. Moskva, Nedra, 1964. 142 p.  
(MIRA 17:6)

ACCESSION NR: AP4014380

S/0240/64/000/002/0096/0098

AUTHOR: Davy\*dov, S. A. (Candidate of medical sciences); Aksel'rod, M. B. (Research associate); Mar'yash, L. R. (Sanitary inspector); Klimenko, Ye. I. (Chemist)

TITLE: Air pollution produced by waste material from ore dressing plants

SOURCE: Gigiyena i sanitariya, no. 2, 1964, 96-98

TOPIC TAGS: air pollution, air pollution test, ore dressing plant area, free silicon oxide level, dust particle size, health problem, air pollution reduction, industrial planning, exhaust stack height

ABSTRACT: Test samples (673) of air taken near 3 ore dressing plants from 1959 to 1961 disclosed a high level of air pollution. Free silicon oxide level of air dust reached as high as 23%. Dust particles of 5 microns or less, which are most harmful to humans, comprised 94.1-99.8% of the dust concentration. Sulfur dioxide gas was found to be negligible. Interviews with 528 persons living in these areas showed that air pollution was a serious health problem causing poor ventilation, soiled clothing, and eye injuries. To reduce air

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ACCESSION NR: AP4014380

pollution, wastes should be filtered before reaching exhaust stacks. Also, provision should be made in industrial planning specifications for the establishment of health safety zones of 2 km or more between ore dressing plants and populated areas. At present there are no specifications of this type. Heights of exhaust stacks, generally ranging from 200 to 250 m, should be coordinated with the absolute amount of waste entering the air. Orig. art. has: 3 tables.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut kommunal'noy gigieny, Kiev (Ukrainian Scientific-research Institute of Communal Hygiene)

SUBMITTED: 21Nov62

DATE ACQ: 03Mar64

ENCL: 00

SUB CODE: AD, ML

NO REF SOV: 000

OTHER: 000

Card 2/2

BAGDASAROV, A.G.; SILAYEV, A.A.; DAVYDOV, S.A., inzh., red.

[Methodological textbook for training blasters in  
hydraulic engineering construction] Uchebno-metodiche-  
skoe posobie dlia podgotovki vzryvnikov na gidrotekhni-  
cheskom stroitel'stve. Moskva, Energiia, 1964. 160 p.  
(MIRA 18:3)



DAVYDOV, Stepan Aleksandrovich; RUBTSOV, Vladimir Konstantinovich;  
DEMIDYUK, G.P., doktor tekhn. nauk, retsenzent; MELIKHOV,  
I.D., ved. red.

[Multiple-row blasting] Mnogoriadnoe vzryvanie. Moskva,  
Nedra, 1965. 94 p. (MIRA 18:6)

DAVYDOV, S.A.

Draw blasting in hydraulic construction. Varyv.rab. no.3:79-90  
'56. (MIRA 16:2)  
(Blasting) (Hydraulic engineering)

DAVYDOV, SH. D.

AID P - 2640

Subject : USSR/Medicine  
Card 1/1 Pub. 37 - 17/22  
Author : ~~Davydov, Sh. D.~~, Scientific Secretary of the North  
Ossetic Commission on the Prevention of Silicosis  
Title : Conference on the Prevention of Silicosis  
Periodical : Gig. i san., 8, 54-55, Ag 1955  
Abstract : An account of the reports presented at the Conference  
in Ordzhonikidze, Dec. 27-28, 1954.  
Institution : See "Author"  
Submitted : No date

DAVYDOV, S. D.

Slides on Chemistry. Khim. v shkole No 2, 1952.

**DAVYDOV, S.D.**

KORZHEV, P.P.; PARMENOV, K.Ya.; DAVYDOV, S.D.; GOL'DFARB, Ya.L.;  
NEYDING, A.B.; DMITRIYENKO, G.V.; ~~redaktor~~; SHIKIN, S.T., tekhnicheskiy redaktor

[Chemistry handbook for teachers of secondary schools] Spravochnik  
po khimii dlia uchitелеi srednei shkoly. Izd. 3-е, perer. Moskva,  
Gos. uchebno-pedagog. izd-vo Ministerstva prosveshchenia RSFSR,  
1954. 370 p. (MLRA 7:11)  
(Chemistry)

DAVIDOV, S. D.

DAVIDOV, S.D.

~~XXXXXXXXXXXX~~  
Book on the history of chemistry ("History of the great law. B.Ste-  
panov. Reviewed by S.D.Davydov.) Khim.v shkole 9 no.4:66-70 J1-Ag  
'54. (MIRA 7:8)

(Chemistry--History) (Stepanov, B.)

DAVYDOV, S.D.

At the All-Union Agricultural Exhibition. Khim. v shkole 9 no.6:  
10-14 N-D '54. (MLRA 8:1)  
(Moscow--Agricultural exhibitions)

DAVYDOV, S.D., (Moskva)

Agrochemical studies in the secondary school ("Agrochemical club  
in the school." P.P.Ivanov. Reviewed by S.D.Davydov). Khim. v  
shkole 11 no.1 Ja-Y '56. (MLRA 9:2)  
(Agricultural chemistry) (Ivanov, P.P.)



DAVIDOV, S.D.

Using topics on the 20th Congress of the Communist Party of the  
Soviet Union in teaching chemistry. Khim.v shkole 11 no.4:26-36  
Jl '56. (MIRA 9:9)

(Chemistry--Study and teaching)

DAVYDOV S.D. (Moskva)

Interesting book ("Stories on invisible substances." IU.V.  
Khodakov. Reviewed by S.D.Davydov). Khim.v shkole 11 no.5:  
73-74 8-0 '56. (MIRA 9:11)  
(Chemistry) ( Khodakov, IU.V.)

NAVYDOV, S.D.

Granular briquets as a new kind of blast furnace raw material.  
Khim. v shkole 11 no.6:16 M-D '56. (MLRA 9:12)  
(Briquets) (Blast furnaces)

DAVIDOV, S.D.

New development in the production of sulfuric acid. Khim. v  
shkole 11 no.6:16 N-D '56. (MLRA 9:12)  
(Sulfuric acid)

DAVIDOV, S. D.

"New Kinds of Plastics and Synthetic Fibers," by S. D. Davydov,  
Khimiya v Shkole, Vol 11, No 6, Nov-Dec 56, p 17

The article discusses new USSR plastics and synthetic fibers as follows:

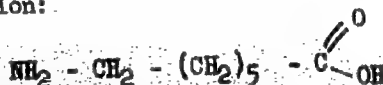
"Among new plastics released by the Soviet industry we will first of all note fluorine plastics, which in many cases replace metals. These plastics are fluorine-substituted derivatives of ethylene. One of these plastics, fluoroplast-3, can be subjected to various types of treatment: pressure molding, injection molding, etc.; it is stable chemically and serves as a good substitute for stainless steel, silver, and gold.

"Fluoroplast-4 has still more valuable properties. This material is an excellent dielectric: its properties remain unchanged at both low and high temperatures. Objects made of fluoroplast-4 stand temperatures from minus 60° to plus 200° and do not change their shape even at plus 300-350°. Metals coated with fluoroplast are reliably protected from the action of acids and alkalis of all concentrations. The new grades of plastics will be widely applied in electronics and aviation as well as in the food, chemical, pharmaceutical, and other industries.

"Polyamide film has received general recognition as a good electrical insulator. Some types of polyamide film have a high stability toward the action of organic solvents and have been applied to advantage in the petroleum industry. In addition to that, polyamide film transmits ultraviolet light. This property will be utilized in agriculture by using polyamide as a material for hothouse panes. Polyamide film is used in the food industry: sausage protected by it is preserved in a fresh state for a long time.

"Soviet engineers have created a "miracle sand" made of synthetic resins. This sand is called ionite. By filtering sea water through it, this water can be freed of salts and made suitable for drinking. Ionites will be used in many regions where virgin lands are developed and where water must be purified from a great number of contaminants. They are used for the concentration of rare metals contained in rocks. By means of ionites vitamins are purified, amino-acids separated, and precise chemical analyses conducted.

"Among miracle fibers developed during recent years we may note the synthetic fibers enant, anid, and lavsan. Enant is synthesized from ethylene and amines and passes over the stage of amino-enantic acid, which has the following constitution:



"It is used for fish nets, cord fibers, tires, and knitted fabrics and goods. An enant fiber stretched out for 75-80 kilometers does not tear, while an iron wire breaks after it has been unwound over a distance of 7.5 kilometers. The stability of enant to light is 20% higher than that of capron. The heat stability of the new fiber is also high: enant fibers stand a temperature of 140°.

"All kinds of products can be made of anid fibers and lavsan, beginning with automobile and aircraft tires, parachutes, and transmission belts and ending with staple fiber, knit goods, and women's stockings. Anid resin, a resilient mass which resembles mother-of-pearl in appearance, is applied in radio engineering.

"Lavsan is the best substitute for wool. The strength of anid and lavsan can be illustrated by the following example: although a capron fiber 15 millimeters thick supports the weight of an adult human being, anid and lavsan surpass it in strength. Fabrics woven of the new synthetic fibers are not damaged by moisture, fungi, or moths."

Sum 1258

11

PROCESSES AND PROPERTIES INDEX

A. Curvette for Photo-Colorimetric Analysis. P. P. Shervinov and N. F. Davydov (Zash. Laz., 1946, 12, 119; C. Ab., 1946, 40, 6893). - [In Russian]. The curvette consists of an ebonite nut, an upper glass cover, rubber lining, the glass curvette proper, an ebonite mounting, and a lower glass cover. It is resistant to the action of alkalis in concentrations used for determinations of Ni.

AS-5LA METALLURGICAL LITERATURE CLASSIFICATION



1. DAVIDOV, S. G., ENG.; STREPETOV, L. M., ENG.
2. USSR (600)
4. Cement - Testing
7. Colorimetric method of determining the amount of plasticizer in cement.  
Biul. stroi. tekhn. 9 no. 19, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953, Unclassified.

DAVYDOV, SERGEI GEORGIEVICH

Michurin's doctrine on the breeding of new animal varieties; Stenogramma  
publishnoi lektsii pročitannoi v 1949 g. c Leningrade. Leningrade, 1949.

DAVID V. S. G., PROF

PA 2/5015

USSR/Agriculture - Breeding  
Fertilization, Heterospermic  
Mar/Apr 49

Effectiveness of Heterospermic Fertilization of  
Farm Animals," Prof S. G. Davydov, M. P. Libizov,  
Cand Agr Sci, Sci Res Lab for Farm Animal Breeding,  
Leningrad-Pushkin, 5 pp

"Agrobiol" No 2

Studies by Piskus, Bokolovskaya, Solovay, and others  
and experiments tabulated at various kolchozes in  
serving one sow with two hogs prove advantages of  
heterospermic fertilization both in effectiveness  
and in quality of the offspring, e.g., greater

2/5015

USSR/Agriculture - Breeding (Contd) Mar/Apr 49  
Fertilization, Heterospermic

average weight. Although previous results have  
been negative, it is possible that additional  
stimulation contributes to additional ovulation.

2/5015

1. DAVYDOV, S. G.: FOMIN, A. I.

2. USSR (600)

4. Poultry Breeding

7. Broad introduction of commercial crossbreeding into poultry husbandry. Ptitsevodstvo  
no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

1. DAVYDOV, S. G. (PROF.)
2. USSR (600)
4. Stock and Stock Breeding
7. Ways of increasing the effectiveness of crossbreeding. Sov. zootekh.  
7 No. 6 (1952) Pushkinskaya Laboratoriya Razvedeniya Sel'skokhozyayst-  
vennykh Zhivotnykh
9. Monthly List of Russian Accessions, Library of Congress, August 1952.  
Unclassified.

1. DAVIDOV, S. G. and POMIN, A. I.

2. USSR (600)

4. Poultry

7. Introducing commercial cross-breeding into poultry raising. Dost.sel'khoz.  
No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

DAVYDOV, S.G.; LEDEEV, M.M.; BARANOVA, D.I.

Raising the butter-fat yield from East Frisian cattle by inter-  
varietal crossing and controlled rearing. Izv. AN SSSR. Ser. biol.  
no. 4:84-94 J1-Ag'55. (MIRA 8:10)

1. Pushkinskaya nauchno-issledovatel'skaya laboratoriya razvede-  
niya sel'sko-khozyaistvennykh zhivotnykh  
(Cattle breeding)

24375

S/142/60/003/005/002/015  
E192/E382

7.2550

AUTHORS: Davydov, S.I. and Shikin, G.A.

TITLE: Transfer of Signals of Varying Frequencies Through  
a Tunable Selective System

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,  
Radiotekhnika, 1960, Vol. 3, No. 5, pp. 435 - 444

TEXT: Signals of varying frequency and filters which are used for the separation of these signals are becoming of importance in radio-engineering; the filters are characterised by the fact that their resonant frequency is variable; such filters can be referred to as tunable selective filters. The transfer of such signals through "fixed" selective filters has been analysed by a number of authors but the problem of a tunable filter has not been investigated. An attempt is made in the following to study this problem. The basic formula in the analysis is the Duhamel integral:

Card 1/10



24375

S/142/60/003/005/002/015  
E192/E382

Transfer of Signals ....

$$u_{BbIX}(t) = \int_0^t e(s)r(t-s)ds \quad (1)$$

where  $u_{BbIX}(t)$  is the voltage at the output of the selective system,  
 $e(t)$  is the input voltage and  
 $r(t-s)$  is the impulse response of the system, the impulse being applied at a time  $t=s$ .  
 For a Gaussian selective filter with variable resonance frequency the impulse response is in the form (Ref. 8 - N.M. Sedyakin, Radiotekhnika i elektronika, 1959, Vol. 4, No. 3)

$$r_0(t) = \begin{cases} K_0 \sqrt{\frac{a}{\pi}} \exp[-a(t-t_0)^2 + j \int_0^t \omega_0(\xi) d\xi] & \text{at } t > 0, \\ 0 & t < 0, \end{cases} \quad (3)$$

Card 2/10

Transfer of Signals ....

S/142/60/003/005/002/015  
E192/E382

provided the impulse is applied at time  $t = 0$ ; in the above,  
 $K_0$  is the transfer coefficient of the system at the  
resonance frequency,  
 $\alpha$  is a parameter determining the bandwidth  $\Delta f$  of the  
receiver at the level  $e^{-1}$  so that

$$\Delta f = 2\sqrt{\alpha/\pi}$$

$t_0$  is the delay time of the system, and

$\omega_0(t)$  is the instantaneous value of the resonance frequency  
of the system.

If the resonance frequency of the Gaussian filter varies  
linearly at a rate  $\gamma$ , Eq. (3) can be written as

$$r_\theta[(t-s), s] = K_0 \sqrt{\frac{\alpha}{\pi}} \exp\left\{-\alpha(t-t_0-s)^2 + j\left[\omega_0(t-s) + \pi\gamma(t^2-s^2)\right]\right\}. \quad (4)$$

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The input signal is assumed to be in the form

$$e(t) = \begin{cases} E(t) \exp[i(\omega_c t + \pi \theta t^2 + \theta)] & \text{for } t > 0; \\ 0 & \text{for } t < 0, \end{cases} \quad (5)$$

where  $E(t)$  is the envelope of the input voltage,  
 $\theta$  is the rate of change of the input signal frequency,  
 $\theta$  is the initial phase of the input voltage.

The formula for the output voltage can now be written as

$$u_{out}(t) = K_0 \sqrt{\frac{\alpha}{\pi}} \int_0^t E(s) \exp \left\{ -\alpha(t-t_0-s)^2 + j \left[ (\omega_c - \omega_0)s - \pi(\gamma - \theta)s^2 + \omega_0 t + \pi\gamma t^2 + \theta \right] \right\} ds, \quad (6)$$

where  $\omega_0$  and  $\omega_c$  are the resonance frequency of the system  
and the signal frequency at the instant  
 $t = 0$ .

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In general, the integral in Eq. (6) can be expressed in terms of the tabulated functions of the probability integral  $W(Z)$ , where  $Z$  is a complex argument. It can now be assumed that the envelope of the input signal is in the form:

$$E(t) = E_0 \exp [a + bt + ct^2] \quad (8)$$

where  $E_0$  is the amplitude and

$a, b, c$  are constant coefficients.

The final formula for the output voltage can approximately be expressed as

$$u_{out}(t) = \frac{E_0 K_0}{2} \sqrt{\frac{a}{a - c + j\pi(\gamma - \theta)}} W(Z_1) \exp[-a(t - t_0)^2 + a + j(\omega_0 t + \pi\gamma t^2 + \theta)] \quad (10)$$

where  $Z_1$  is given by  
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